



# BUBT

BANGLADESH UNIVERSITY OF  
BUSINESS AND TECHNOLOGY

## ASSIGNMENT

Assignment No - 02

Course NO: CSE 122

Course Name: Object Oriented Programming  
Language Lab

Submission Date: 10-04-2023

Submitted To

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# **Bangladesh University of Business & Technology (BUBT)**

## **Department of Computer Science and Engineering**

**Assignment - 02: Spring 2023**

**Course Code: CSE 122 | Course Title: Object Oriented Programming Language Lab**

**Intake: 50<sup>th</sup>, Program: B.Sc in CSE (Bi-Semester)**

**Marks – 10**

### **CO**

### **Question**

**CO2** Imagine a publishing company that markets both book and audiocassette versions of its works. Create a class publication that stores the title (a string) and price (type float) of a publication. From this class derive two classes: book, which adds a page count (type int), and tape, which adds a playing time in minutes (type float). Each of these three classes should have a getData() function to get its data from the user at the keyboard, and a putData() function to display its data.

Write a main program to test the book and tape classes by creating instances of them, asking the user to fill in data with getData(), and then displaying the data with putData().

## Assignment No - 02

```
#include<iostream>
#include<string>
using namespace std;
class publication
{
    protected:
        string title;
        float price;
    public:
        publication() {
            title=" ";
            price=0.0;
        }
        publication(string t,float p)
        {
            title=t;
            price=p;
        }
    public:
void getdata() {
    cout<<"Enter title of publication: ";
    cin>>title;
    cout<<"Enter price of publication: ";
    cin>>price;
}
void putdata(void) {
    cout<<"Publication titles :"<<title<<endl;
    cout<<"Publication price :"<<price<<endl;
}
};

class book : public publication
{
    int pagecount;
    public:
    book()
    {
        pagecount=0;
    }
    book(string t,float p,int pc):publication(t,p)
    {
        pagecount=pc;
    }
    void getdata(void) {
        publication::getdata();
        cout <<"Enter Book Page Count :";
        cin>> pagecount;
    }
}
```

```

    }

    void putdata(void) {
        publication::putdata();
        cout<< "Book page count:"<<pagecount <<endl;
    }
};
class CD: public publication
{
    float time1;
public:
    CD()
    {
        time1=0.0;
    }
    CD(string t, float p, float tim):publication(t,p)
    {
        time1=tim;
    }
    void getdata(void)
    {
        publication::getdata();
        cout <<"Enter tape's playing time:";
        cin>> time1;
    }
    void putdata(void)
    {
        publication::putdata();
        cout<<" Tape's playing time :"<< time1<<endl;
    }
};
int main(){
    cout<<endl<<"Book data"<<endl;
    book b("C++",230,300);
    b.putdata();
    cout<<endl<<"CD Data"<<endl;
    CD c("C++",100,120.5);
    c.putdata();
    cout<<"\n Enter New Details Of Book :\n";
    b.getdata();
    c.getdata();
    cout<<"\n\n Book data entered by user:\n";
    b.putdata();
    c.putdata();
    return 0;
}

```